ABSTRACT

A valve operating system for an internal combustion engine has a rocker arm, a rocker actuation mechanism, a ball and socket joint, and a valve activation device. The rocker arm is connected to the rocker actuation mechanism. The ball and socket joint is connected to the rocker arm and to the valve activation device. The ball and socket joint has a retention device connected to a ball portion and a socket portion. The retention device holds the ball and socket portions together. The retention device is positioned in an external groove formed by the socket portion.